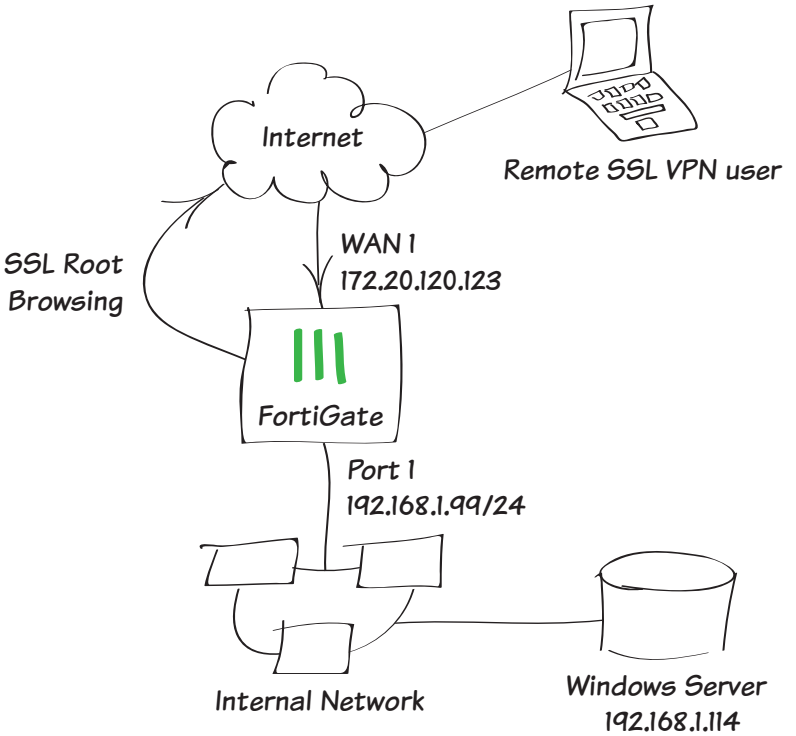
Providing remote users with access using SSL VPN

This example provides remote users with access to the corporate network using SSL VPN and connect to the Internet through the corporate FortiGate unit. During the connecting phase, the FortiGate unit will also verify that the remote user's antivirus software is installed and current.

1. Creating an SSL VPN tunnel for remote users
2. Creating a user and a user group
3. Adding an address for the local network
4. Adding security policies for access to the Internet and internal network
5. Setting the FortiGate unit to verify users have current AntiVirus software
6. Results



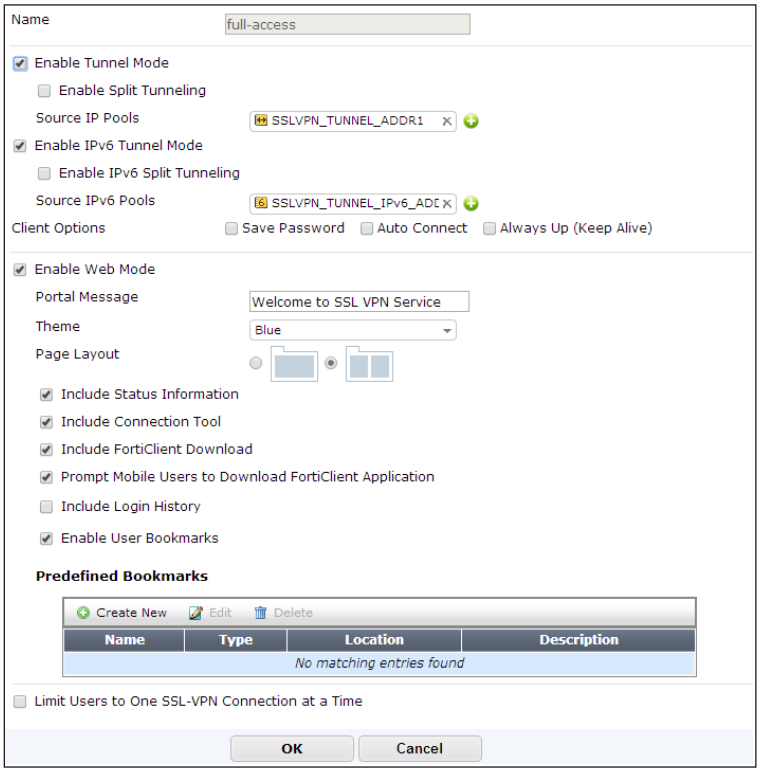
1. Creating an SSL VPN tunnel for remote users

Go to **VPN > SSL > Portals**.

Edit the full-access portal.

The full-access portal allows the use of tunnel mode and/or web mode. In this scenario we are using both modes.

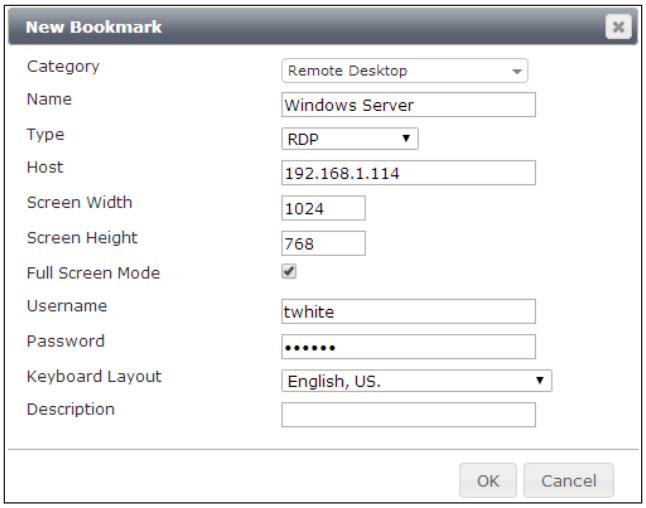
Enable Split Tunneling is *not* enabled so that all Internet traffic will go through the FortiGate unit and be subject to the corporate security profiles.



Select **Create New** in the **Predefined Bookmarks** area to add a bookmark for a remote desktop link/connection.

Bookmarks are used as links to internal network resources.

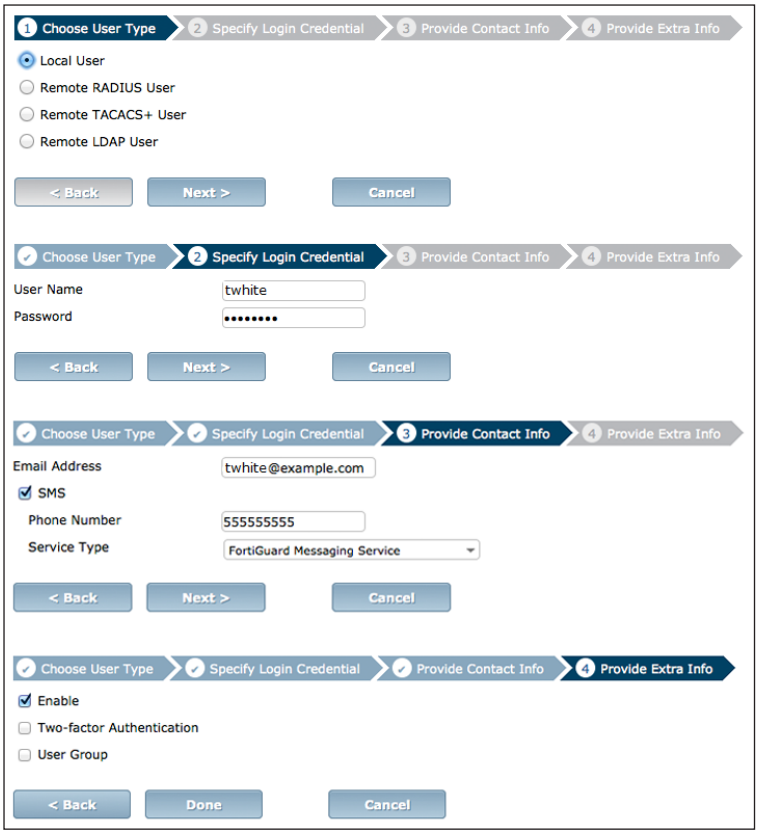
You must include a username and password. You will create this user in the next step, so be sure to use the same credentials.



2. Creating a user and a user group

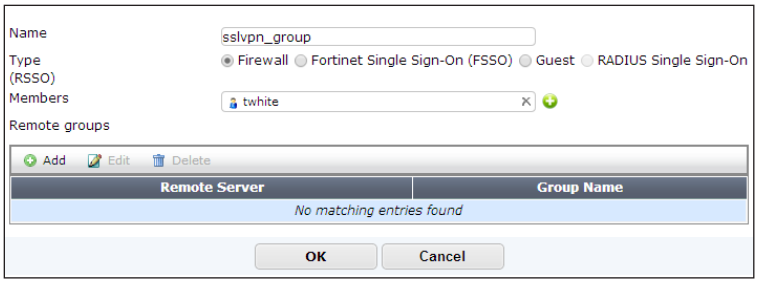
Go to **User & Device > User > User Definition**.

Add a remote user with the User Creation Wizard (in the example, ‘twhite’, with the same credentials used for the predefined bookmark).



Go to **User & Device > User > User Groups**.

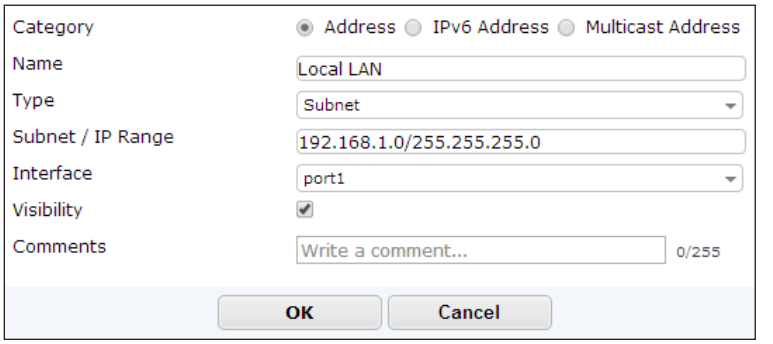
Add the user ‘twhite’ to a user group for SSL VPN connections.



3. Adding an address for the local network

Go to **Policy & Objects > Objects > Addresses**.

Add the address for the local network. Set **Subnet / IP Range** to the local subnet and set **Interface** to an internal port.



4. Adding security policies for access to the Internet and internal network

Go to **Policy & Objects > Policy > IPv4**.

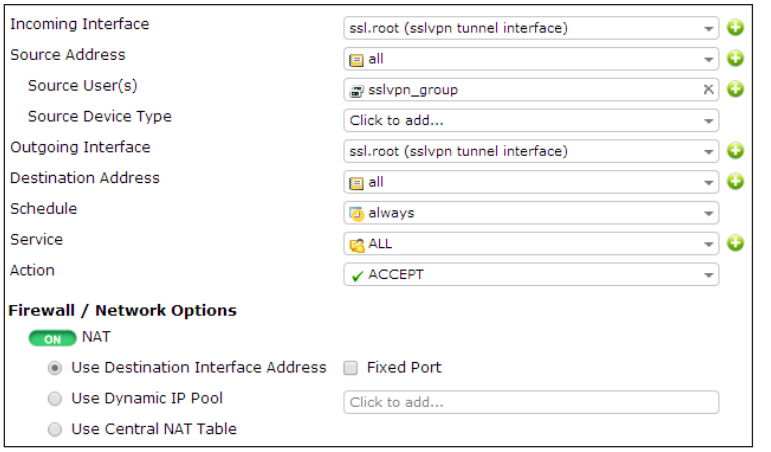
Add a security policy allowing access to the internal network through the *ssl.root* VPN tunnel interface.

Set **Incoming Interface** to **ssl.root**.

Set **Source Address** to **all** and select the **Source User** group you created in step 2.

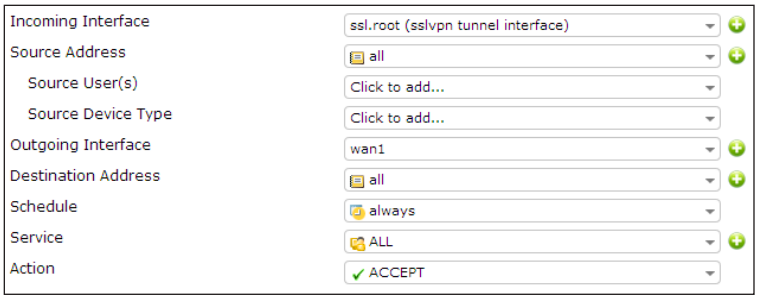
Set **Outgoing Interface** to **ssl.root**, so that VPN traffic can flow between the remote user and the FortiGate.

Set **Destination Address** to **all**, enable **NAT**, and configure any remaining firewall and security options as desired.



Add a second security policy allowing SSL VPN access to the Internet.

For this policy, **Incoming Interface** is set to **ssl.root** and **Outgoing Interface** is set to **wan1**.



5. Setting the FortiGate unit to verify users have current AntiVirus software

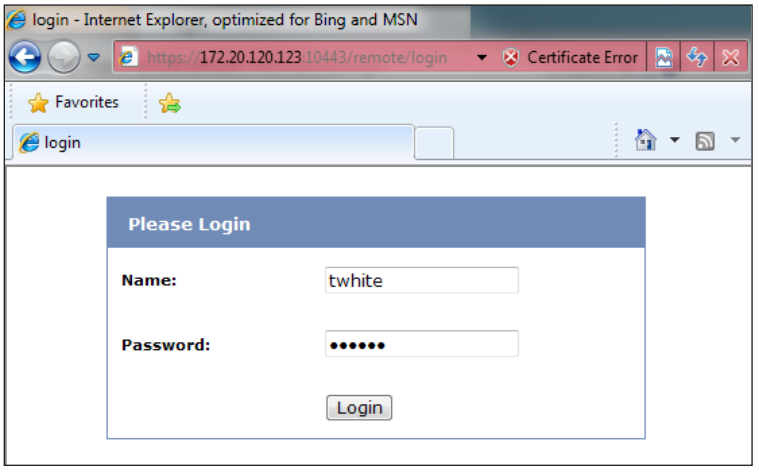
Go to **System > Status > Dashboard**.

In the **CLI Console** widget, enter the commands on the right to enable the host to check for compliant AntiVirus software on the remote user's computer.

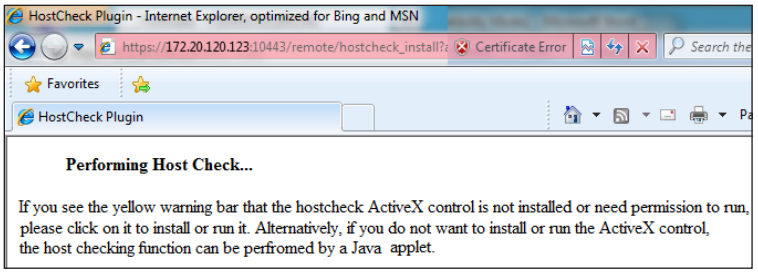
```
# config vpn ssl web portal
(portal) # edit full-access
(full-access) # set host-check av
(full-access) # end
```

6. Results

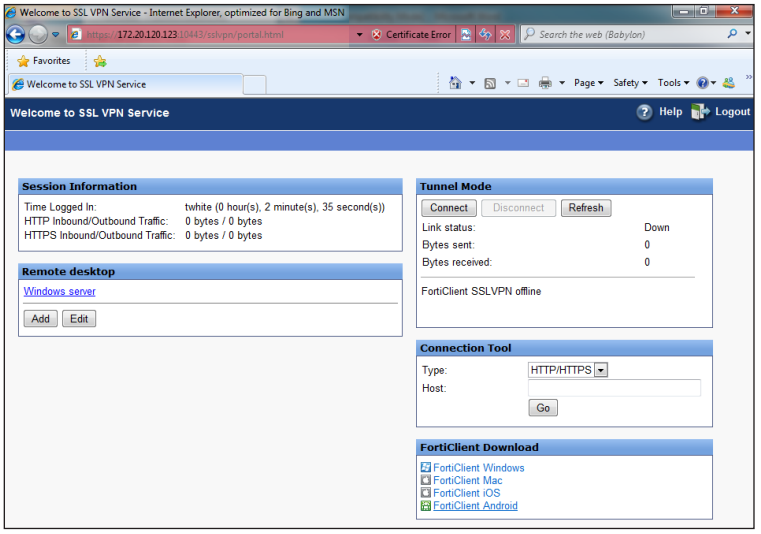
Log into the portal using the credentials you created in step 2.



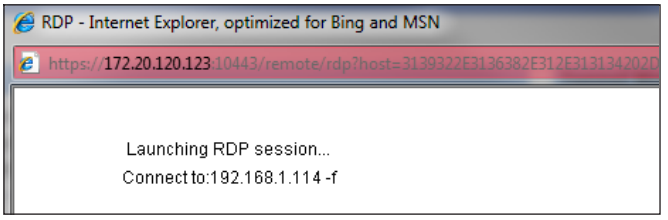
The FortiGate unit performs the host check.



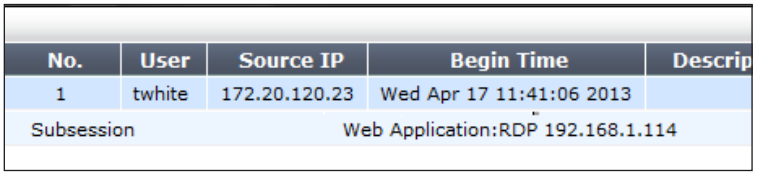
After the check is complete, the portal appears.



Select the bookmark **Remote Desktop** link to begin an RDP session.

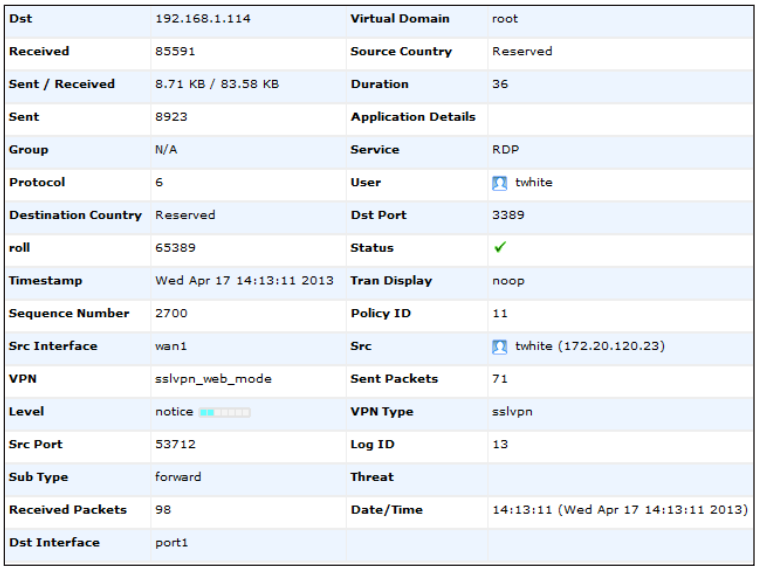


Go to **VPN > Monitor > SSL-VPN Monitor** to verify the list of SSL users. The Web Application description indicates that the user is using web mode.



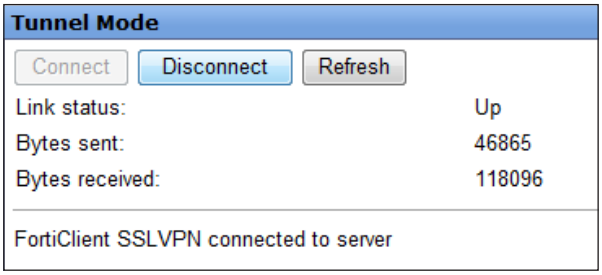
No.	User	Source IP	Begin Time	Descrip
1	twhite	172.20.120.23	Wed Apr 17 11:41:06 2013	
Subsession			Web Application:RDP 192.168.1.114	

Go to **Log & Report > Traffic Log > Forward Traffic** and view the details for the SSL entry.

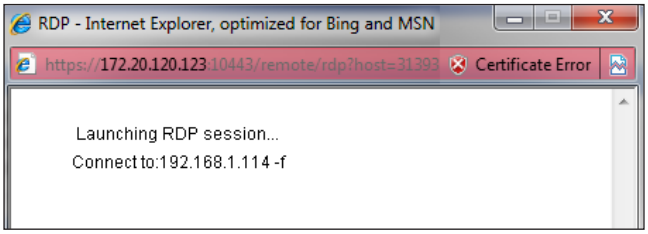


Dst	192.168.1.114	**Virtual Domain**	root
Received	85591	**Source Country**	Reserved
Sent / Received	8.71 KB / 83.58 KB	**Duration**	36
Sent	8923	**Application Details**	
Group	N/A	**Service**	RDP
Protocol	6	**User**	twhite
Destination Country	Reserved	**Dst Port**	3389
roll	65389	**Status**	✓
Timestamp	Wed Apr 17 14:13:11 2013	**Tran Display**	noop
Sequence Number	2700	**Policy ID**	11
Src Interface	wan1	**Src**	twhite (172.20.120.23)
VPN	sslvpn_web_mode	**Sent Packets**	71
Level	notice	**VPN Type**	sslvpn
Src Port	53712	**Log ID**	13
Sub Type	forward	**Threat**	
Received Packets	98	**Date/Time**	14:13:11 (Wed Apr 17 14:13:11 2013)
Dst Interface	port1		

In the **Tunnel Mode** widget, select **Connect** to enable the tunnel.

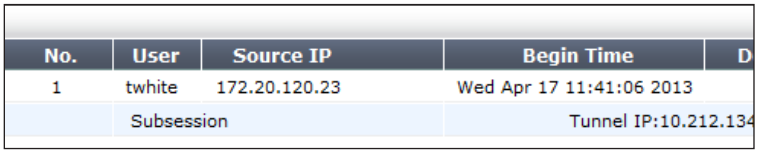


Select the bookmark **Remote Desktop** link to begin an RDP session.



Go to **VPN > Monitor > SSL-VPN Monitor** to verify the list of SSL users.

The tunnel description indicates that the user is using tunnel mode.



No.	User	Source IP	Begin Time	D
1	twhite	172.20.120.23	Wed Apr 17 11:41:06 2013	
	Subsession		Tunnel IP:10.212.134	

Go to **Log & Report > Traffic Log > Forward Traffic** and view the details for the SSL entry.

Dst	192.168.1.114	**Virtual Domain**	root
Received	326664	**Source Country**	Reserved
Sent / Received	54.36 KB / 319.01 KB	**Duration**	83
Sent	55665	**Application Details**	
Group	N/A	**Service**	RDP
Protocol	6	**User**	twhite
Destination Country	Reserved	**Dst Port**	3389
roll	65389	**Status**	✓
Timestamp	Wed Apr 17 14:17:15 2013	**Tran Display**	noop
Sequence Number	3618	**Policy ID**	11
Src Interface	wan1	**Src**	twhite (172.20.120.23)
VPN	sslvpn_web_mode	**Sent Packets**	329
Level	notice	**VPN Type**	sslvpn
Src Port	53820	**Log ID**	13
Sub Type	forward	**Threat**	
Received Packets	407	**Date/Time**	14:17:15 (Wed Apr 17 14:17:15 2013)
Dst Interface	unknown-0		

Go to **Log & Report > Traffic Log > Forward Traffic**.

Internet access occurs simultaneously through the FortiGate unit.

Refresh Download Raw Log

#	Date/Time	Src Interface	Dst Interface	Src	Dst
1	14:26:05	ssl.root	wan1	10.212.134.200	74.125.133.95
2	14:26:04	ssl.root	wan1	10.212.134.200	173.194.77.94
3	14:26:04	ssl.root	wan1	10.212.134.200	173.194.43.79
4	14:26:03	ssl.root	wan1	10.212.134.200	66.171.121.34 (fortinet.co
5	14:25:57	ssl.root	wan1	10.212.134.200	74.121.50.17 (www.pages
6	14:25:44	ssl.root	wan1	10.212.134.200	208.91.113.212
7	14:25:40	ssl.root	wan1	10.212.134.200	192.168.55.30
8	14:25:40	ssl.root	wan1	10.212.134.200	192.168.55.30
9	14:25:40	ssl.root	wan1	10.212.134.200	192.168.55.30
10	14:24:39	ssl.root	wan1	10.212.134.200	213.199.179.159
11	14:24:37	ssl.root	wan1	10.212.134.200	213.199.179.159
12	14:24:37	ssl.root	wan1	10.212.134.200	132.246.2.6 (www.msftncs

Select an entry to view more information.

Dst	66.171.121.34 (fortinet.com)	**Virtual Domain**	root
Received	938	**Source Country**	Reserved
Src NAT IP	172.20.120.123	**Sent / Received**	535 B / 938 B
Duration	17	**Sent**	535
Src NAT Port	54165	**Application Details**	
Service	HTTP	**Protocol**	6
Destination Country	United States	**Dst Port**	80
roll	65389	**Status**	close
Timestamp	Wed Apr 17 14:26:03 2013	**Tran Display**	snat
Sequence Number	8096	**Policy ID**	8
Src Interface	ssl.root	**Src**	10.212.134.200
Sent Packets	6	**Level**	notice